

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for providing user location information for a personal information management program, comprising:

generating position coordinates of a wireless device and time information indicating [[a]] times [[time]] when the position coordinates were generated, wherein a user is associated with the wireless device; [[and]]

~~processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period~~

processing the position coordinates and time information to determine whether a change in a series of position coordinates at times indicates a predefined activity of the user occurring during an activity time period during which the position coordinates and the time information were generated; and

generating information on the determined predefined activity for the activity time period.

2. (Currently Amended) The method of claim 1, wherein the position coordinates and time information are generated at the wireless device, further comprising:

[[transmitting]] receiving from the wireless device the generated position coordinates and time information to a server; and

~~storing, with the server, the generated position coordinates and time information in a database, wherein the server processes the position coordinates and time information~~ are processed to determine the predefined activity during the activity time period and [[the]] locations and associated time periods where the user was present.

3. (Currently Amended) The method of claim 1, wherein the position coordinates and time information are generated at the wireless device, wherein the wireless device processes the position coordinates and time information to determine ~~[[the]]~~ locations and associated time periods where the user was present, further comprising:

~~transmitting~~, with receiving from the wireless device~~[[,]]~~ the determined locations and associated time periods ~~to a server~~;

~~storing, with the server~~, the determined locations and time periods in a database.

4. (Currently Amended) The method of claim 1, further comprising:
providing a plurality of location boundaries defining multiple location coordinates;
for each location boundary, providing a location description including information describing the location boundary;

for each generated position coordinate, determining whether the position coordinate is included in one of the provided location boundaries~~[[,]]~~; and

processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period, and wherein at least one determined location comprises one predefined location boundary including position coordinates, and wherein the information generated on the at least one location includes the location description for the predefined location boundary comprising the location.

5. (Canceled)

6. (Original) The method of claim 4, wherein at least one location boundary and associated location description is provided by:

receiving location boundary and location description information from a transmitter.

7. (Currently Amended) The method of claim 6, further comprising:
associating, with the wireless device, the location description information with the generated position coordinates within the location boundary received from the transmitter; and ~~transmitting, with~~ receiving from the wireless device[[,]] the position coordinates, associated time information, and associated location description ~~to a server~~, wherein the ~~server processes the~~ position coordinates and time information are processed to determine location boundaries including the position coordinates, and wherein the information generated on the locations includes the location description provided by the transmitter for the location boundary comprising the location.

8. (Currently Amended) The method of claim 1, wherein position coordinates and time information are generated by multiple wireless devices, wherein each wireless device is associated with one user, further comprising:

receiving position coordinates and time information from the multiple wireless devices;
and

storing the position coordinates and time information in a database with information associating each position coordinate and time information with one user, wherein the position coordinates and time information are processed for the multiple wireless devices to determine predefined activities for the wireless devices.

9. (Canceled)

10. (Canceled)

11. (Currently Amended) The method of claim 1, further comprising:
receiving a request for information on the user for a selected time interval;
~~determining time periods associated with locations that are~~ one predefined activity
occurring during [[within]] the selected time interval; and
generating information on the predefined activity during ~~locations and associated time periods that are within~~ the selected time interval.

12. (Original) The method of claim 11, further comprising:
transmitting the generated information to an initiator of the request for information to enable the initiator to display the location information and time periods where the user of the wireless device was located for the time interval.

13. (Original) The method of claim 12, wherein the initiator requesting the information comprises a program installed on a computer, and wherein the generated information is transmitted over the Internet to the computer.

14. (Original) The method of claim 12, wherein the initiator requesting the information is the wireless device, and wherein the wireless device displays the generated information for the requested time interval.

15. (Currently Amended) The method of claim 12, further comprising:
determining scheduled events for the user within the time interval; and
generating information on the scheduled events within the time interval to enable the initiator to display information on the scheduled events along with the predefined activity occurring geographic locations where the user was located during the selected time interval.

16. (Original) The method of claim 1, wherein each position coordinate is expressed as an x, y, z coordinate.

17. (Canceled)

18. (Currently Amended) A method for generating a calendar for a personal information management program, comprising:
receiving selection of a time interval;
for the selected time interval, determining position coordinates of a wireless device and time information indicating [[a time]] times when the position coordinates were generated, wherein a user is associated with the wireless device;

~~processing the position coordinates and time information to determine information on locations and associated time periods, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period; and~~

processing the position coordinates and time information during the selected time interval to determine whether a change in a series of the position coordinates at times during the selected time interval indicates a predefined activity of the user occurring during the selected time interval;

generating information on the predefined activity within the selected time interval; and displaying information on the predefined activity of the user and the selected time interval ~~determined locations and time periods where the user of the wireless device was located for the selected time interval.~~

19. (Currently Amended) The method of claim 18, further comprising:
determining scheduled events for the user within the selected time interval; and
displaying information on the scheduled events within the selected time interval adjacent to the displayed information on the determined ~~locations and time periods~~ predefined activity where the user was located for the selected time interval.

20. (Canceled)

21. (Canceled)

22. (Original) The method of claim 18, wherein the information is displayed in a calendar Graphical User Interface (GUI).

23. (Currently Amended) A system adapted to communicate with a wireless device and for providing user location information for a personal information management program, comprising:

means for generating position coordinates of ~~[[a]]~~ the wireless device and time information indicating ~~[[a time]]~~ times when the position coordinates were generated, wherein a user is associated with the wireless device; ~~[[and]]~~

~~means for processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period~~

means for processing the position coordinates and time information to determine whether a change in a series of position coordinates at times indicates a predefined activity of the user occurring during an activity time period during which the position coordinates and the time information were generated; and

means for generating information on the determined predefined activity for the activity time period.

24. (Currently Amended) The system of claim 23, wherein the position coordinates and time information are generated at the wireless device, further comprising:

means for ~~[[transmitting]]~~ receiving the generated position coordinates and time information ~~to a server~~ from the wireless device; and

means for storing, ~~with the server~~, the generated position coordinates and time information in a database, wherein the ~~server processes the position coordinates and time information~~ are processed to determine the predefined activity during the activity time period and ~~[[the]]~~ locations and associated time periods where the user was present.

25. (Currently Amended) The system of claim 23, wherein the position coordinates and time information are generated at the wireless device, wherein the wireless device includes the means for processing the position coordinates and time information to determine ~~[[the]]~~ locations and associated time periods where the user was present, further comprising:

means for transmitting~~[[,]]~~ receiving from ~~[[with]]~~ the wireless device~~[[,]]~~ the determined locations and associated time periods ~~to a server~~; and

means for storing, ~~with the server~~, the determined locations and time periods in a database.

26. (Currently Amended) The system of claim 23, further comprising:
means for providing a plurality of location boundaries defining multiple location coordinates;
means for providing, for each location boundary, a location description including information describing the location boundary;
means for determining, for each generated position coordinate, whether the position coordinate is included in one of the provided location boundaries[.,,]; and
means for processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period, and wherein at least one determined location comprises one predefined location boundary including position coordinates, and wherein the information generated on the at least one location includes the location description for the predefined location boundary comprising the location.

27. (Canceled)

28. (Original) The system of claim 26, wherein the means for providing the location boundaries and associated location descriptions performs:
receiving location boundary and location description information from a transmitter.

29. (Currently Amended) The system of claim 28, ~~further comprising: wherein means for associating, with the wireless device[.,,]~~ associates the location description information with the generated position coordinates within the location boundary received from the transmitter;
and

means for ~~transmitting, with~~ receiving from the wireless device[[,]] the position coordinates, associated time information, and associated location description ~~to a server, wherein the server processes~~

means for processing the position coordinates and time information to determine location boundaries including the position coordinates, and wherein the information generated on the locations includes the location description provided by the transmitter for the location boundary comprising the location.

30. (Currently Amended) The system of claim 23, wherein position coordinates and time information are generated by multiple wireless devices, wherein each wireless device is associated with one user, further comprising:

means for receiving position coordinates and time information from the multiple wireless devices; and

means for storing the position coordinates and time information in a database with information associating each position coordinate and time information with one user, wherein the position coordinates and time information are processed for the multiple wireless devices to determine predefined activities for the wireless devices.

31. (Canceled)

32. (Canceled)

33. (Currently Amended) The system of claim 23, further comprising:

means for receiving a request for information on the user for a selected time interval;

means for determining ~~time periods associated with locations that are~~ one predefined activity occurring during [[within]] the selected time interval; and

means for generating information on the predefined activity during ~~locations and associated time periods that are within~~ the selected time interval.

34. (Original) The system of claim 33, further comprising:
means for transmitting the generated information to an initiator of the request for information to enable the initiator to display the location information and time periods where the user of the wireless device was located for the time interval.

35. (Original) The system of claim 34, wherein the initiator requesting the information comprises a program installed on a computer, and wherein the generated information is transmitted over the Internet to the computer.

36. (Original) The system of claim 34, wherein the initiator requesting the information is the wireless device, and wherein the wireless device displays the generated information for the requested time interval.

37. (Currently Amended) The method of claim 34, further comprising:
means for determining scheduled events for the user within the time interval; and
means for generating information on the scheduled events within the time interval to enable the initiator to display information on the scheduled events along with the predefined activity occurring ~~geographic locations where the user was located~~ during the selected time interval.

38. (Original) The system of claim 23, wherein each position coordinate is expressed as an x, y, z coordinate.

39. (Canceled)

40. (Currently Amended) A system for generating a calendar for a personal information management program, comprising:
means for receiving selection of a time interval;
means for determining, for the selected time interval, position coordinates of a wireless device and time information indicating [[a time]] times when the position coordinates were generated, wherein a user is associated with the wireless device;

~~means for processing the position coordinates and time information to determine information on locations and associated time periods, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period; and~~

means for processing the position coordinates and time information during the selected time interval to determine whether a change in a series of the position coordinates at times during the selected time interval indicates a predefined activity of the user occurring during the selected time interval;

means for generating information on the predefined activity within the selected time interval; and

means for displaying information on the predefined activity of the user and the selected time interval ~~determined locations and time periods where the user of the wireless device was located for the selected time interval.~~

41. (Currently Amended) The system of claim 40, further comprising:
means for determining scheduled events for the user within the selected time interval; and
means for displaying information on the scheduled events within the time interval adjacent to the displayed information on the determined ~~locations and time periods~~ predefined activity where the user was located for the selected time interval.

42. (Canceled)

43. (Canceled)

44. (Original) The system of claim 40, wherein the information is displayed in a calendar Graphical User Interface (GUI).

45. (Currently Amended) An article of manufacture including code [[method]] for providing user location information for a personal information management program and adapted to communicate with a wireless device associated with a user, wherein the code is capable of causing operations to be performed, the operations comprising:

generating position coordinates of ~~[[a]]~~ the wireless device and time information indicating ~~[[a time]]~~ times when the position coordinates were generated, ~~wherein a user is associated with the wireless device; and~~

~~processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period~~

processing the position coordinates and time information to determine whether a change in a series of position coordinates at times indicates a predefined activity of the user occurring during an activity time period during which the position coordinates and the time information were generated; and

generating information on the determined predefined activity for the activity time period.

46. (Currently Amended) The article of manufacture of claim 45, wherein the position coordinates and time information are generated at the wireless device, wherein the operations further ~~[[comprising]]~~ comprise:

~~transmitting~~ receiving the generated position coordinates and time information ~~to a server; and~~

~~storing, with the server,~~ the generated position coordinates and time information in a database, wherein ~~the server processes the position coordinates and time information~~ are processed to determine the predefined activity during the activity time period and ~~[[the]]~~ locations and associated time periods where the user was present.

47. (Currently Amended) The article of manufacture of claim 45, wherein the position coordinates and time information are generated at the wireless device, wherein the wireless device processes the position coordinates and time information to determine ~~[[the]]~~ locations and associated time periods where the user was present, wherein the operations further ~~comprising~~ comprise:

~~transmitting, with receiving from~~ the wireless device[[,]] the determined locations and associated time periods ~~to a server~~;

~~storing, with the server~~, the determined locations and time periods in a database.

48. (Currently Amended) The article of manufacture of claim 45, wherein the operations further [[comprising]] comprise:

providing a plurality of location boundaries defining multiple location coordinates;
for each location boundary, providing a location description including information describing the location boundary;

for each generated position coordinate, determining whether the position coordinate is included in one of the provided location boundaries[[,]]; and

processing the position coordinates and time information to determine information on locations and associated time periods, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period, and wherein at least one determined location comprises one predefined location boundary including position coordinates, and wherein the information generated on the at least one location includes the location description for the predefined location boundary comprising the location.

49. (Canceled)

50. (Original) The article of manufacture of claim 48, wherein at least one location boundary and associated location description is provided by:

receiving location boundary and location description information from a transmitter.

51. (Currently Amended) The article of manufacture of claim 50, wherein the operations further [[comprising]] comprise:

associating, with the wireless device, the location description information with the generated position coordinates within the location boundary received from the transmitter; and

~~transmitting, with~~ receiving from the wireless device, the position coordinates, associated time information, and associated location description ~~to a server~~, wherein the ~~server processes~~ the position coordinates and time information are processed to determine location boundaries including the position coordinates, and wherein the information generated on the locations includes the location description provided by the transmitter for the location boundary comprising the location.

52. (Currently Amended) The article of manufacture of claim 45, wherein position coordinates and time information are generated by multiple wireless devices, wherein each wireless device is associated with one user, wherein the operations further ~~comprising~~ comprise:

receiving position coordinates and time information from the multiple wireless devices;
and

storing the position coordinates and time information in a database with information associating each position coordinate and time information with one user, wherein the position coordinates and time information are processed for the multiple wireless devices to determine predefined activities for the wireless devices.

53. (Canceled)

54. (Canceled)

55. (Currently Amended) The article of manufacture of claim 45, wherein the operations further ~~[[comprising]]~~ comprise:

receiving a request for information on the user for a selected time interval;
determining ~~time periods associated with locations that are~~ one predefined activity occurring during ~~[[within]]~~ the selected time interval; and
generating information on the ~~locations and associated time periods that are within~~ predefined activity during the selected time interval.

56. (Currently Amended) The article of manufacture of claim 55, wherein the operations further [[comprising]] comprise:

transmitting the generated information to an initiator of the request for information to enable the initiator to display the location information and time periods where the user of the wireless device was located for the time interval.

57. (Original) The article of manufacture of claim 56, wherein the initiator requesting the information comprises a program installed on a computer, and wherein the generated information is transmitted over the Internet to the computer.

58. (Original) The article of manufacture of claim 56, wherein the initiator requesting the information is the wireless device, and wherein the wireless device displays the generated information for the requested time interval.

59. (Currently Amended) The article of manufacture of claim 56, wherein the operations further [[comprising]] comprise:

determining scheduled events for the user within the time interval; and
generating information on the scheduled events within the time interval to enable the initiator to display information on the scheduled events along with the predefined activity occurring geographic locations where the user was located during the selected time interval.

60. (Original) The article of manufacture of claim 45, wherein each position coordinate is expressed as an x, y, z coordinate.

61. (Canceled)

62. (Currently Amended) An article of manufacture including code for generating a calendar for a personal information management program and adapted to communicate with a wireless device associated with a user, wherein the code is capable of causing operations to be performed, the operations comprising [[by]]:

receiving selection of a time interval;

for the selected time interval, determining position coordinates of a wireless device and time information indicating ~~[[a time]]~~ times when the position coordinates were generated; ~~wherein a user is associated with the wireless device;~~

~~processing the position coordinates and time information to determine information on locations and associated time periods, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period; and~~

processing the position coordinates and time information during the selected time interval to determine whether a change in a series of the position coordinates at times during the selected time interval indicates a predefined activity of the user occurring during the selected time interval;

generating information on the predefined activity within the selected time interval; and
displaying information on the predefined activity of the user and the selected time interval ~~determined locations and time periods where the user of the wireless device was located for the selected time interval.~~

63. (Currently Amended) The article of manufacture of claim 62, wherein the operations further ~~[[comprising]]~~ comprise:

determining scheduled events for the user within the selected time interval; and
displaying information on the scheduled events within the time interval adjacent to the displayed information on the determined ~~locations and time periods~~ predefined activity where the user was located for the selected time interval.

64. (Canceled)

65. (Canceled)

66. (Original) The article of manufacture of claim 62, wherein the information is displayed in a calendar Graphical User Interface (GUI).

67. (Currently Amended) A computer readable medium for providing user location information for a personal information management program of a user at a wireless device, wherein the computer readable medium includes at least one computer readable data structure comprising:

position coordinates of a wireless device and time information indicating [[a time]] times when the position coordinates were generated, wherein a user is associated with the wireless device; [[and]]

~~locations and associated time periods, wherein for each determined location and associated time period, the user of the wireless device was located at the location for the associated time period, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein the locations and associated time periods are determined by processing the position coordinates and time information~~

a predefined activity of the user occurring during an activity time period determined by processing the position coordinates and time information to determine whether a change in a series of position coordinates at times indicates the predefined activity during which the position coordinates and the time information were generated; and

information on the determined predefined activity for the activity time period.

68. (Currently Amended) The computer readable medium of claim 67, further comprising:

a plurality of location boundaries defining multiple location coordinates, wherein each location boundary includes a location description including information describing the location boundary, wherein for each generated position coordinate, a determination is made as to whether the position coordinate is included in one of the provided location boundaries~~[[,]]~~;

information on locations and associated time periods determined by processing the position coordinates and the time information, wherein at least one location for which information is determined includes multiple generated position coordinates and the associated time period for the location includes the time information generated for the position coordinates included in the determined location, wherein for each determined location and associated time

period, the user of the wireless device was located at the location for the associated time period,
and wherein at least one determined location comprises one predefined location boundary
including position coordinates, and wherein the information generated on the at least one
location includes the location description for the predefined location boundary comprising the
location.

69. (Canceled)

70. (Canceled)

71. (Canceled)

72. (Canceled)

73. (New) The method of claim 1, further comprising:

determining locations of the wireless device during the activity time period based on the
position coordinates of the wireless device during the activity time period, wherein generating
the information comprises generating information on the predefined activity and the locations
where the predefined activity occurred.

74. (New) The method of claim 73, further comprising:

generating a record associating the determined locations with the determined predefined
activity.

75. (New) The method of claim 73, wherein determining the locations of the wireless
device during the activity time period comprises determining the position coordinates at a first
and last geographical locations of the wireless device at a first and last time periods of the
activity time period.

76. (New) The method of claim 73, wherein determining the predefined activity
comprises determining a rate of change in distance per unit of time of the position coordinates
during the activity time period.

77. (New) The method of claim 1, wherein the predefined activity is a member of a set of predefined activities comprising at least one of driving, walking, running, bicycle riding, and flying in an airplane.

78. (New) The method of claim 4, wherein the operations of processing the position coordinates and associated time periods to determine the predefined activity is performed for ranges of position coordinates not determined to be included in one of the provided location boundaries.

79. (New) The method of claim 18, further comprising:
determining locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.

80. (New) The system of claim 23, further comprising:
means for determining locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.

81. (New) The system of claim 80, further comprising:
Means for generating a record associating the determined locations with the determined predefined activity.

82. (New) The system of claim 80, wherein determining the locations of the wireless device during the activity time period comprises determining the position coordinates at a first and last geographical locations of the wireless device at a first and last time periods of the activity time period.

83. (New) The system of claim 73, wherein determining the predefined activity comprises determining a rate of change in distance per unit of time of the position coordinates during the activity time period.

84. (New) The system of claim 23, wherein the predefined activity is a member of a set of predefined activities comprising at least one of driving, walking, running, bicycle riding, and flying in an airplane.

85. (New) The system of claim 26, wherein the operations of processing the position coordinates and associated time periods to determine the predefined activity is performed for ranges of position coordinates not determined to be included in one of the provided location boundaries.

86. (New) The system of claim 40, further comprising:
means for determining locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.

87. (New) The article of manufacture of claim 45, wherein the operations further comprise:
determining locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.

88. (New) The article of manufacture of claim 87, wherein the operations further comprise:
generating a record associating the determined locations with the determined predefined activity.

89. (New) The article of manufacture of claim 87, wherein determining the locations of the wireless device during the activity time period comprises determining the position coordinates at a first and last geographical locations of the wireless device at a first and last time periods of the activity time period.

90. (New) The article of manufacture of claim 87, wherein determining the predefined activity comprises determining a rate of change in distance per unit of time of the position coordinates during the activity time period.

91. (New) The article of manufacture of claim 45, wherein the predefined activity is a member of a set of predefined activities comprising at least one of driving, walking, running, bicycle riding, and flying in an airplane.

92. (New) The article of manufacture of claim 48, wherein the operations of processing the position coordinates and associated time periods to determine the predefined activity is performed for ranges of position coordinates not determined to be included in one of the provided location boundaries.

93. (New) The article of manufacture of claim 62, further comprising:
determining locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.

94. A system comprising:
a wireless device associated with a user;
a server;
code executed by the wireless device that is adapted to generate position coordinates of the wireless device and time information indicating times when the position coordinates were generated;
code executed by the server that is adapted to:

process the position coordinates and time information to determine whether a change in a series of position coordinates at times indicates a predefined activity of the user occurring during an activity time period during which the position coordinates and the time information were generated; and

generate information on the determined predefined activity for the activity time period.

95. The system of claim 94, wherein the code executed by the server is further adapted to determine locations of the wireless device during the activity time period based on the position coordinates of the wireless device during the activity time period, wherein generating the information comprises generating information on the predefined activity and the locations where the predefined activity occurred.